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Agricultural Engineering.

Agricultural engineering. In history of cooperative extension work in Michigan, 1914-1939. East Lansing, Mich., 1941. p.12-14. Michigan. Extension division. Extension bulletin no.229.
Discusses drainage program. Sketch shows septic tank installation.

Engineering in agriculture. Berkeley, Calif., 1940. p.129-138.
In science--servant of agriculture. Report of agricultural experiment station, July 1, 1938 to June 30, 1940. University of California.

Rural engineering. In serving New Hampshire farms and homes; annual report of director of cooperative work in agriculture and home economics, 1940. Durham, N. H., 1941. p.16-17. New Hampshire. Extension service. Bulletin no.60.

"Unit-operations" principle applied to agricultural engineering laboratory instruction. By L.M.K. Boelter and H.B. Walker.
Agricultural engineering. v.22, no.8. August 1941. p.289-291.

Agriculture.

Agricultural research in New Hampshire. Annual report of the director of the New Hampshire agricultural experiment station for 1940. Durham, N. H., 1941. 42p. New Hampshire. Agricultural experiment station. Bulletin no.330.

Agriculture and the war machine. By Sir E. J. Russell.
Scottish journal of agriculture. v.23, no.3. July 1941. p.179-192.

Agriculture, priorities and defense. By Robert J. Lynch.
Implement & tractor. v.56, no.17. August 16, 1941. p.13, 16, 23-25.

American agriculture---the first 300 years. By Everett E. Edwards.
In farmers in a changing world. Yearbook of agriculture, 1940. Washington, U. S. Govt. print. off., 1940. p.171-276.

Annual report of director for the fiscal year ending June 30, 1940. Newark, Del., 1940. 41p. Delaware. Agricultural experiment station. Bulletin no.227.

Agriculture. (Cont'd.)

Brief chronology of American agricultural history. Compiled by Dorothy C. Goodwin. In 1940 yearbook of agriculture. Farmers in a changing world. Washington, U. S. Govt. print. off., 1940. p.1184-1196.

Farmers in a changing world. 1940 yearbook of agriculture. Washington, U. S. Govt. print. off., 1940. 1215p. U. S. Department of agriculture.

Fiftieth annual report, January 1 to December 31, 1939. Alabama Polytechnic institute. Agricultural experiment station. Auburn, Alabama, 1940. 43p.

Fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. 124p. Washington. Agricultural experiment station. Bulletin no.394.

Fifty-first annual report of the Arizona agricultural experiment station for the year ending June 30, 1940. Tucson, Ariz., 1941. 112p.

Fifty-ninth annual report for the fiscal year ended June 30, 1940. New York state agricultural experiment station. Geneva, N. Y., 1940. 58p.

Fifty-second annual report of the Texas agricultural experiment station, 1939. College Station, Texas, 1940. 304p.

Fifty-third annual report, 1940. College Station, Texas, 1940. 294p. Texas. Agricultural experiment station.

Fifty-third annual report of Cornell university agricultural experiment station, 1940. Ithaca, N. Y., 1940. 205p.

Fifty-third annual report of the South Carolina experiment station of Clemson agricultural college for the year ended June 30, 1940. Clemson, S. C., 1940. 193p.

Fifty-third annual report of the Texas agricultural experiment station, 1940. College Station, Texas, 1941. 294p.

42nd annual convention of the association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. 236p. Held in Atlanta, Ga., 1941.

History of cooperative extension work in Michigan, 1914-1939. East Lansing, Mich., 1941. 123p. Michigan. Extension division. Extension bulletin no.229.

Michigan agricultural experiment station report; two years ended June 30,1940. East Lansing, Mich., 1940. 51p.

Agriculture. (Cont'd.)

Ohio agricultural statistics, 1939. Wooster, O., 1941. 59p. Ohio. Agricultural experiment station. Bulletin no.621.

Progress report, 1939-1940. Research and investigational activities in agricultural engineering. By Chas. E. Seitz. Blacksburg, Va., 1940. 58p. Bulletin of the Virginia Polytechnic institute. v.34, no.3.

Report of progress for year ending June 30, 1940. Orono, Me., 1940. 294p. Maine. Agricultural experiment station. Bulletin no.400.

Research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. 112p.

Research aids Utah agriculture: biennial report of Utah agricultural experiment station, 1938-1940. Logan, Utah, 1940. 118p. Utah. Agricultural experiment station. Bulletin no.294.

Science--servant of agriculture. By C. B. Hutchison and S. B. Freeborn. Berkeley, Calif., 1940. 244p. Report of the agricultural experiment station of college of agriculture. University of California. July 1, 1938 to June 30, 1940.

Science serving agriculture; report of the agricultural experiment station of the Oklahoma A. and M. college for the biennium July 1, 1938 to June 30, 1940. Stillwater, Okla., 1940. 190p.

Science works for the farmer. Fifty-second annual report for the fiscal year ending June 30, 1940. Fayetteville, Ark., 1940. 45p. Arkansas. Agricultural experiment station. Bulletin no.405.

Scottish agriculture in war-time. Scottish journal of agriculture. v.23, no.3. July 1941. p.192-208.

Serving Montana agriculture through research. Forty-sixth and forty-seventh annual reports of the Montana agricultural experiment station, July 1, 1938 to June 30, 1940. Bozeman, Montana, 1940. 68p.

Serving New Hampshire farms and homes. Annual report of director of cooperative work in agriculture and home economics, 1940. Durham, N. H., 1941. 29p. New Hampshire. Extension service. Bulletin no.60.

Twenty-third annual report of the department of agriculture, July 1, 1939 to June 30, 1940. Springfield, Ill.,[n.d.]. 193p.

What's new in farm science. Part I, fifty-seventh annual report for year ended June 30, 1940. Madison, Wis., 1940. 80p. Wisconsin. Agricultural experiment station. Bulletin no.450.

Agriculture. (Cont'd.)

What's new in farm science. Part II, fifty-seventh annual report for year ended June 30, 1940. Madison, Wis., 1941. 112p. Wisconsin. Agricultural experiment station. Bulletin no.451.

Will new products solve farm problem? By F. A. Wirt. Implement record. v.38, no.4. April 1941. p.11-12, 38.

Air Conditioning.

New method of duct construction simplifies air conditioning. By T. M. Cunningham. Heating, piping, and air conditioning. v.13, no.8. August 1941. p.495-496. Describes fabrication of ducts which do not need to be concealed.

Recent trends in air conditioning. By Milton Kalischer. Refrigerating engineering. v.42, no.1. July 1941. p.7-10, 49. Author describes several new developments in field of air conditioning, pointing out that these methods and refinements are only a few of many now in use. Special attention is given to electrostatic precipitation, ultra violet light, odors and mood conditioning, blackout plant air conditioning, and heating by reversed refrigeration cycle.

Barns.

Observations at the experimental dairy barn. By I. D. Mayer and J. H. Hilton. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.26.

Brooders, Electric.

Home-made electric brooder is improved. In what's new in farm science. Part I, fifty-seventh annual report for year ended June 30, 1940. Madison, Wis., 1940. p.66-67. Wisconsin. Agricultural experiment station. Bulletin no.450.

Use of electric heat in brooding early spring farrowed pigs. By T. E. Hienton and C. M. Vestal. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.23.

Use of electricity in brooding chicks. By T. E. Hienton and W. P. Albright. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.21.

Building Construction.

Analysis of building frames with semi-rigid connections. Discussion. By Wayne W. Smith, Leonard P. Zick, Jr. and Conrad C. Wan. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1177-1179.

Building Construction. (Cont'd.)

Buildings under bombing. By O. Bondy. Engineering news record. v.127, no.7. August 14, 1941. p.214-215.
By airmail from London comes this first-hand account of structural damage from bombing. Oblique hits on walls are more common than vertical hits on roofs. Damage even from same size bombs is extremely variable. Fireproofing of steelwork is particularly important. Bearing-wall buildings are especially vulnerable.

Forming details and practices for architectural concrete. By A. J. Boase. Engineering news record. v.127, no.7. August 14, 1941. p.240-242. Successful use of architectural concrete depends upon form details. Better workmanship and somewhat better materials are required. Tightness, rigidity and ease of removal are necessary form characteristics. Form ties at window and door openings should be carefully placed to pull the sheathing tight. Allowance should be made for form swelling. Handling of construction joints and rustication inserts involves special techniques. Height of lifts should be less than for ordinary work. Curved wall forms require minimum stud spacing or horizontal ribs.

How to select proper bonds in brickwork. By Guy B. Arthur. American builder. v.63, no.8. August 1941. p.72-73, 114-115, 116. Strength, appearance and cost of various brick bonds and identification of styles discussed.

Plastic theory of reinforced concrete design. Discussion. By Messrs. Jaroslav J. Polivka and Paul W. Abeles. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1127-1136.

Rigid frames without diagonals (The Vierendeel truss). Discussion. By Messrs. Jaroslav J. Polivka and W. A. Miller. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1157-1165.

Building Materials.

Concrete bricks for dams and farm buildings. By J. C. Liebenberg. Pretoria, Union of South Africa, 1941. p.13-16. Union of South Africa. Department of agriculture and forestry. (Soil and veld conservation series no.4) Bulletin no.231. Reprinted from Farming in South Africa. April 1941.

Expansion of concrete through reaction between cement and aggregate. Discussion. By Messrs. J. MacNeil Turnbull and Robert A. Kinzie, Jr. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1104-1108.

Method of measuring thermal diffusivity and conductivity of stone and concrete. By W. T. Thomson. Manhattan, Kansas, 1941. 15p. Kansas. State college. Engineering experiment station. Bulletin no.40.

Building Materials. (Cont'd.)

Recommended practice and standard specifications for concrete and reinforced concrete. Discussion. By Messrs. Walter H. Wheeler, Duff A. Abrams and F. E. Richart. American society of civil engineers. Proceedings, v.67, no.6. June 1941. p.1087-1103.

Stability of fiber sheathing boards as determined by accelerated aging. By Daniel A, Jessup, Charles G, Weber and Samuel G. Weissberg. Washington, U. S. Govt. print. off., 1941. 4p. National bureau of standards. Building materials and structures. Report BMS69.

Concrete.

Concrete in sea water: A revised viewpoint needed. Discussion. By Messrs. Harry E. Squire and J. W. B. Blackman. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1150-1156.

Conservation of resources.

Recommended conservation practices in Texas. By M. R. Bentley. Agricultural engineering. v.22, no.8. August 1941. p.284.

Cotton.

Annual report of the cotton experiment station, 1937-1938. By Lumchiag Jotisalikara. Klongtan, Swankaloke, Thailand, [1941]. 41p. Department of agriculture and fisheries. Cotton experiment station. B. E. no.2480.

Cotton production in the United States. Washington, U. S. Govt. print. off., 1941. 37p. U. S. Department of commerce. Bureau of the census.

Cotton Gins and Ginning.

Reducing power waste in operating cotton gins. By Victor L. Stedronsky, Thomas L. Baggette and Arvid J. Johnson. Washington, U. S. Govt. print. off., 1941. 20p. U. S. Department of agriculture. Circular no.601.

Reduction of power waste in operating cotton gins. By Victor L. Stedronsky Thomas L. Baggette and Arvid J. Johnson. Cotton ginners' journal. v.12, no.12. September 1941. p.9, 15.

Cotton Machinery.

Cotton dusting machine costing no more than the price of a bale of cotton. Acco press. v.19, no.6. June 1941. p.7-8.
Table gives results obtained in six years of insect control work by United States department of agriculture at its Port Lavaca experiment station.

Cotton Machinery. (Cont'd.)

Harvesting cotton by machinery. By A. D. Jackson. Cotton ginners' journal. v.12, no.12. September 1941. p.12.

Mechanical harvesting of cotton. By H. P. Smith, D. T. Killough, D. L. Jones and M. H. Byrom. In fifty-third annual report of the Texas agricultural experiment station, 1940. College Station, Tex., 1941. p.120-121.

Mechanical harvesting of cotton. By H. P. Smith, D. T. Killough, D. L. Jones and M. H. Byrom. In fifty-second annual report of the Texas agricultural experiment station, 1939. College Station, Texas, 1940. p.122-123.

Crops (Drying).

Dehydration and processing of medicinal herbs. By W. T. Ackerman. In agricultural research in New Hampshire. Annual report of the director of the New Hampshire agricultural experiment station for 1940. Durham, N. H., 1941. p.20-21. New Hampshire. Agricultural experiment station. Bulletin no.330.

Feeding studies of barn-dried versus field-dried hay. By C. E. Wylie and S. A. Hinton. In 42nd annual convention of association of southern workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.90.

The Georgia studies of barn dried hay. By William E. Hudson. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.89.

Seed corn drying investigations. By R. H. Wileman and A. J. Ullstrup. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.20.

Study of a system of forage drying using lowcost hay driers. By John W. Sjogren, C. W. Holdaway and P. D. Rodgers. In progress report, 1939-1940: research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.45-50. Bulletin of the Virginia Polytechnic institute. v.34, no.3.

Summary of barn hay-curing activities. By John A. Schaller. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.87-88.

Virginia studies of barn hay-drying. By John W. Sjogren and P. D. Rodgers. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.90.

Dams.

Cavitation in outlet conduits of high dams. Discussion. By Messrs. G. H. Hickox and J. M. Mousson. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1119-1126.

Law relating to dams on dry watercourses and information relative thereto. Topeka, Kansas, 1941. 24p. Report of Kansas state board of agriculture. v.60, no.244.

Masonry dams: A symposium: discussion. By Messrs. Charles H. Paul and Joseph Jacobs, Irving B. Crosby, I. L. Tyler, and Byram W. Steele. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1081-1086.

Defense.

Guide to library facilities for national defense. By Carl L. Cannon. Revised edition. Chicago, American library association, 1941. 448p.

Drainage.

Drainage: A neglected phase of Oregon agriculture. By Dr. W. L. Powers. Oregon farmer. v.64, no.15. July 17, 1941. p.3.

Drainage needed on red clay soils. In what's new in science. Part II, fifty-seventh annual report for year ended June 30, 1940. Madison, Wis., 1941. p.101-102. Wisconsin. Agricultural experiment station. Bulletin no.451.

Drainage on irrigated swamp areas. Journal of agriculture of South Australia. v.44, no.8. March 1941. p.443. Drainage of the area as a unit. Drainage of separate blocks.

Land drainage (Scotland) act, 1941. Scottish journal of agriculture. v.23, no.3. July 1941. p.272-275. Purpose of this Act, which received the Royal Assent on 26th March, 1941, is to enable the Secretary of State during present war to carry out arterial drainage works in various parts of Scotland where agricultural land is unproductive, or nearly so, because of its liability to floods. It is war-time measure to meet need for maintaining and increasing food production.

Electricity- Distribution.

Moose measures cost of electric service. By R. U. Blasingame. Pennsylvania farmer. v.125, no.1. July 5, 1941. p.5.

Electricity on the Farm.

Farm electrification. In history of cooperative extension work in Michigan, 1914-1939. East Lansing, Mich., 1941. p.14-15. Michigan. Extension division. Extension bulletin no.229.

Electricity on the Farm. (Cont'd).

A perspective view of rural electrification. By S. P. Lyle. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.87.

Rural electrification. By Robert T. Beall. In 1940 yearbook of agriculture. Farmers in a changing world. Washington, U. S. Govt. print. off., 1940. p.790-809.

Rural electrification investigations. In progress report, 1939-1940; research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.23-37. Bulletin of the Virginia Polytechnic institute. v.34, no.3.

A study of the use of electricity on two hundred low-income farms. By Oral A. Brown and Jefferson B. Rodgers. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.91-92.

Erosion Control.

Conservacion de los suelos en Mexico. By Lorenzo R. Patiño. Mexico, D. F., 1941. 27p. Comision nacional de irrigacion.

The effect of slope, character of soil, and cropping treatments on erosion losses from crop land. In progress report, 1939-1940: research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.7-11. Bulletin of Virginia Polytechnic institute. v.34, no.3.

Moisture conservation and erosion control on permanent pasture land. In progress report, 1939-1940: research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.11-17. Bulletin of the Virginia Polytechnic institute. v.34, no.3.

Save your soil. n.p.,1940. 17p. Maryland. State soil conservation committee. Bulletin no.1.

Soil conservation districts in action on the land. By Glenn K. Rule. Washington, U. S. Govt. print. off., 1941. 25p. U. S. Department of agriculture. Miscellaneous publication no.448.

Soil conservation investigations. By I. D. Mayer. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.25.

Soil erosivity and infiltration. By M. A. Sharp. In fifty-second annual report of the Tennessee agricultural experiment station, 1939. Knoxville, Tenn., 1940. p.19.

A study of soil erosion in the agricultural areas of Rhode Island and the comparative erodibility of five major soil series associated with these areas. By Ernest A. Perry. Kingston, R. I., 1941. 25p. Rhode Island. Agricultural experiment station. Bulletin no.277.

Farm Buildings.

Contribution of farm structures to the progress of southern agriculture. By R. H. Driftmier. In 42nd annual convention of the association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.75.

Cost of farm buildings. By H. B. White. Hoard's dairyman. v.86, no.3. February 10, 1941. p.89.

Questions about southern farm buildings. By W. V. Hukill. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.80

Farm Machinery and Equipment.

Agricultural machinery and national defense. By G. W. McCuen. Engineering experiment station news. Ohio state university. v.13, no.1. p.7-8. February 1941.

Census reports. Farm implement news. v.62, no.16. August 7, 1941. p.21. Tractors on farms. Motor trucks on farms. Farm expenditures. Automobiles on farms.

Combines cut harvest costs. By I. F. Reed. Progressive farmer. v.56, no.5. May 1941. p.12.

Contribution of farm power and machinery to the progress of southern agriculture. By R. M. Merrill. In 42nd annual convention of association of southern agricultural workers. Proceedings. p.76. Raleigh, N. C., Capital printing co., 1941.

Eight men on hop picker replace 100 in field. Popular mechanics. v.76, no.3. September 1941. p.33. Following last season's tests with tractor-drawn hop picking machine in state of Washington, 27 of mammoth machines are being used on approximately 1,000 acres in the Yakima Valley hop lands to replace hand labor. Eight men operate "moving stairway on wheels", accomplishing as much as 100 hand pickers. One man walks ahead of tractor and cuts vines about three feet from ground. "Pullers", stationed on platform, pull vines from trellises and pass them to "feeders", who stand facing each other waist high to platform. Feeders, in turn, clamp lower ends of vines to moving parallel bars extending crosswise, which drag vines upward over moving bed of wire picking fingers. At top of incline vines disappear into maze of moving belts, fans and brushes. There they are again combed to remove all hops, which are shaken and sifted free of leaves, stems and dirt.

Equipment for handling legumes. By M. A. Sharp. In fifty-second annual report of the Tennessee agricultural experiment station, 1939. Knoxville, Tenn., 1940. p.18-19.

Farm efficiency with reference to farm equipment. In report of Michigan agricultural experiment station for the two years ended June 30, 1940. East Lansing, Mich., 1940. p.6.

Farm Machinery and Equipment. (Cont'd.)

Farm machinery and national defense. By Fred A. Wirt. Implement & tractor. v.56, no.17. August 16, 1941. p.12, 15-16.

Farm machinery demonstration. By W. N. McAdams and C. S. Patrick. In fifty-third annual report of the South Carolina experiment station. Clemson, N. C., 1940. p.21.

Farm mechanization with special reference to southern agriculture. By H. G. Davis. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.81-82.

Farm mechanization with special reference to southern agriculture. By James L. Shepherd. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.82-83.

Farm power machinery. By B. A. Jennings and F. W. Barrett. In fifty-third annual report of Cornell university agricultural experiment station, 1940. Ithaca, N. Y., 1940. p.91.

Forage harvesters speed up grass silage-making. In what's new in farm science. Part I, fifty-seventh annual report for year ended June 30, 1940. Madison, Wis., 1940. p.64-65. Wisconsin. Agricultural experiment station. Bulletin no.450.

Investigations on control implements for Canada thistle and similar weeds. By R. H. Wileman and O. C. Lee. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[1941]. p.19.

Investigations on the power requirements and corn borer kill secured with the corn husker shredder. By R. H. Wileman, G. A. Ficht and T. E. Hienton. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.19.

Low corn cutting demonstrations. By R. H. Wileman. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[1941]. p.19.

Southern implement dealers of the past and present. By R. L. Willis. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.84-85.

Studies with hay harvesting equipment. By I. D. Mayer. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[1941]. p.25.

Farm Machinery and Equipment. (Cont'd.)

Studies with plow trash shields. By R. H. Wileman. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.18-19.

Studies with the combined harvester thresher. By I. D. Mayer. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.24.

Farm Power.

Costs of farm power and equipment. By J. P. Hertel and Paul Williamson. Ithaca, N. Y., 1941. 38p. Cornell university. Agricultural experiment station. Bulletin no.751.

Fats and Oils.

Summary of the drying oil situation. Paint, oil and chemical review. v.103, no.11. May 22, 1941. p.7-10, 29-31. Survey reveals necessity for increased spring acreages of flax and soybeans and for as many experimental plantings as possible of castor beans this spring to determine where they will best grow and to produce sufficient seed to insure a substantial 1942 crop for commercial purposes.

Fertilizers.

Fertilizers for early cabbage, tomatoes, cucumbers, and sweet corn. By John Bushnell. Wooster, Ohio, 1941. 30p. Ohio. Agricultural experiment station. Bulletin no.622.

Fire Protection.

Fire defense. Edited by Horatio Bond. Boston, Mass., National fire protection association, 1941. 216p.

Fire-prevention education. By J. Burr Taylor. In selected papers from the 1940 Indiana fire school. Lafayette, Ind., 1940. p.28-33. Purdue university. Engineering extension department. Extension series no.49.

Increased defense production requires more fire safeguards. By Leonard F. Maar. Southern power and industry. v.59, no.9, September 1941. p.60-62.

Some new thoughts on fire prevention. By W. T. Stoneham. In selected papers from the 1940 Indiana fire school. Lafayette, Ind., 1940. p.62-68. Purdue university. Engineering extension department. Extension series no.49.

Fire Protection. (Cont'd.)

Suggestions for the 1940 Indiana fire-prevention program. By Arthur Kring. In selected papers from the 1940 Indiana fire school. Lafayette, Ind., 1940. p.51-57. Purdue university. Engineering extension department. Extension series no.49.

Treating spruce and balsam fir Christmas trees to reduce fire hazard. Madison, Wis., 1941. 3p. U. S. forest service. Forest products laboratory. Technical note no.250.

Flax.

Flax as a winter crop in south Texas. In Texas. Agricultural experiment station. Annual report, 1940. College Station, Texas, 1940. p.75-76.

Flax growing in cereal districts. By O. Bowden. Journal of agriculture of South Australia. v.44, no.8. March 1941. p.422-426, 427. Description of the crop. Requirements of the crop. Time and method of harvesting. Results from experimental plots, 1940.

Floods and Flood Control.

Direct method of flood routing. By C. O. Wisler and E. F.Brater. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1053-1063. Method of flood routing is described herein, successful use of which depends only upon availability of dependable stream-flow records during typical flood at various points on main stream or on tributaries whose flow is to be routed downstream. No cross sections of stream channel or velocities of flow are required. Nor are discharge records on all of tributaries needed. Hydrograph of inflow from unmeasured area is directly computed. This flow and that at each of upstream stations is then routed downstream. These routed flows show extent to which each upper tributaries contribute to flood peak at each downstream point. Check on accuracy of results is provided by adding routed flows and comparing resulting hydrograph with actual records. Entire procedure is based upon storage equation and upon principle that, for all high stages, there is straight-line relationship between volume of storage contained in any reach of river channel and sum of inflow rate at upper end and outflow rate at lower end of that reach. Except perhaps for unusual channel conditions, this relationship holds true.

Measuring Ohio's rivers: Action of flood detention reservoir. By Tate Dalrymple. Engineering experiment station news. Ohio state university. v.13, no.1. p.25-26. February 1941.

Floors.

Selection, installation, finish, and maintenance of wood floors for dwellings. By R. K. Helphenstine, Jr. Washington, U. S. Govt. print. off., 1940. 26p. U. S. Department of agriculture. Circular no.489.

Foods, Frozen.

Food freezing is economical. By Pearl Mary Copeland. Oregon farmer. v.64, no.14. July 3, 1941. p.3.

Freezing preservation of Utah fruits and vegetables. In research aids Utah agriculture; biennial report of Utah agricultural experiment statio 1938-1940. Logan, Utah, 1940. p.72-76.

Frozen food studies. In fifty-ninth annual report, New York state agricultural experiment station. Geneva, N. Y., 1940. p.14.

Georgia research recommends freezing foods before packing. Refrigerating engineering. v.42, no.1. July 1941. p.20.

Processing of fruits and vegetables by freezing. By H. C. Diehl, Horace Campbell and Walter J. Clore. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.98. Washington. Agricultural experiment station. Bulletin no.394.

Fuels.

How much do you know about diesel fuels? By Orville Adams. Southern power and industry. v.59, no.9. September 1941. p.78-81.

Heat Transmission.

Computed thermal conductivity of common woods. Madison, Wis., 1941. 4p. U. S. forest service. Forest products laboratory. Technical note no.248.

Heating.

New psychrometric chart for low temperature and humidities. By C. N. Deverall. Heating and ventilating. v.38, no.6. June 1941. p.51-55. Previous psychrometric charts have been almost impossible to use in solving low temperatures and relative humidities. To overcome undesirable features of these charts author has derived this chart in which scale below zero has been enlarged to three times that of scale above zero and has many other improvements which make it easier and more accurate than older charts.

Panel heating and cooling analysis. By B. F. Raber and F. W. Hutchinson. Heating, piping, and air conditioning. v.13, no.8. August, 1941. p.512-523. Rational method of analyzing panel heating problems is described. General equations are given leading toward determination of mean radiant and inside temperatures corresponding to fixed panel temperature and known outside temperature. Intent of paper is to outline basic theory of radiant heating or cooling calculation rather than develop practical design methods.

Heating. (Cont'd.)

Water-air chart. By William Goodman. Heating, piping and air conditioning. v.13, no.6. June 1941. p.357-360, 363. Use for solving problems involving the exchange of heat between air and water.

Hydraulics.

Hydraulics of sprinkling systems for irrigation. Discussion. By Messrs. Tom A. Bither, Ralph W. Powell and Harry F. Blancy. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.1167-1172.

Insulation.

Home insulation, an effective conservation and national-defense measure. By Paul M. Tyler. Washington, D. C., 1941. 12p. U. S. Department of the interior. Bureau of mines. Information circular no.7166.

How to figure refrigeration insulation, with practical pointers on erection. Refrigerating engineering. v.42, no.2. August 1941. Refrigerating engineering application data-section 27. 8p.

Irrigated Lands.

Water-logging of irrigated lands and remedial measures. By R. Kahawita. Rhodesia agricultural journal. v.38, no.6. June 1941. p.302-313.

Irrigation.

Finances and economics of irrigation projects. By Kanwar Sain. In proceedings of the Punjab engineering congress, 1939. Lahore, Mufid-I-'Am press, 1939. p.189-259y. Paper no.228.

Furrows vs. sprinklers for orchard irrigation. By Arthur F. Pillsbury. Pacific rural press. v.141, no.10. May 17, 1941. p.375.

Irrigation branch experiment station. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.88-101. Washington. Agricultural experiment station. Bulletin no.394.

Irrigation of vegetables. In science works for the farmer. Fifty-second annual report for the fiscal year ending June 30, 1940. Fayetteville, Ark., 1940. p.27-28. Arkansas. Agricultural experiment station. Bulletin no.405.

Irrigation requirement of arable Oregon soils. By W. L. Powers and M. R. Lewis. Corvallis, Oregon, 1941. 40p. Oregon. Agricultural experiment station. Station bulletin no.394.

Irrigation. (Cont'd.)

Methods of irrigation. By Harry G. Nickle. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.97-98. Washington. Agricultural experiment station. Bulletin no.394.

Salts in irrigation water. By Raymond A. Hill. American society of civil engineers. Proceedings. v.67, no.6. June 1941. p.975-990. Those concerned with domestic and industrial water supplies were first to appreciate importance of mineral salts invariably present in natural stream and ground waters. Irrigation engineers later began to realize that water in its pure form is never found in nature, and that natural water may be properly termed a mineral, of which H_2O is principal constituent. Unfortunately, there has been tendency for irrigation engineers to disregard character of other constituents of natural water, limiting themselves largely to consideration of total amount of dissolved solids. Interpretation of chemical analyses of irrigation water generally has been left to agriculturalist. In effort to bridge this gap between engineer and agriculturalist, writer developed geochemical chart. This he has found most useful for classification of irrigation waters and for solution of problems having to do with mixtures of water and with changes in quality resulting from use of water for irrigation.

Subirrigation for gardens. By Hal. F. Eier and W. G. Anstein. Manhattan, Kansas, 1941. 14p. Mimeographed. Kansas. State college. Extension service. Extension M. circular no.36.

Supplementary irrigation. In progress report, 1939-1940: research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.19-20. Bulletin of Virginia Polytechnic institute. v.34, no.3.

Time and amount of irrigation. By Harry G. Nickle and H. P. Singleton. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.96-97. Washington. Agricultural experiment station. Bulletin no.394.

Tree and fruit responses from irrigation. By Walter J. Clore and Alvin L. Kenworthy. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.92. Washington. Agricultural experiment station. Bulletin no.394.

Use of an evaporation index in timing the irrigation of muck crops. By D. Conin and J. D. Wilson. Bimonthly bulletin. Ohio. Agricultural experiment station. v.26, no.209. p.63-69. March-April, 1941.

Land Utilization.

State legislation for better land use. By an inter-bureau committee of the U.S. Department of agriculture. Washington, U. S. Govt. print. off., 1941. 122p.

Milk Cooling.

Cooling milk on the farm. Hoard's dairyman. v.86, no.11. June 10, 1941. p.376, 379.

Milk cooling on Kansas farms. By June Roberts and George H. Larson. Manhattan, Kansas, 1941. 39p. Kansas. Agricultural experiment station. Bulletin no.295.

Miscellaneous.

The AAA---What it is. Prepared by Division of Information. Washington, U. S. Govt. print. off., 1940. 14p. U. S. Department of agriculture. Agricultural adjustment administration, G-102.

Governmental accounting and budgeting. A list of recent references. By Florence S. Hellman. Washington, D. C., 1940. 33p. Mimeographed. Library of Congress. Division of bibliography.

Numerical list of current publications of the United States department of agriculture. By Fred L. Zimmerman and Phyllis R. Read. Washington, U. S. Govt. print. off., 1941. 929p. U. S. Department of agriculture. Miscellaneous publication no.450.

Paints and Painting.

Fire-retardant paints containing borax. Madison, Wis., 1941. 4p. U. S. Forest service. Forest products laboratory. Technical note no.249.

Paint white for more light. By James A. Meacham. Stove builder. v.6, no.8. August 1941. p.30-34, 38, 40.

Pest Control.

Control of insect pests of grain in elevator storage. By R. T. Cotton and Geo. B. Wagner. Washington, U. S. Govt. print. off., 1941. 22p. U. S. Department of agriculture. Farmers' bulletin no.1880.

Electrocutors for codling moth. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.14. Washington. Agricultural experiment station. Bulletin no.394.

Use of electric traps as a possible control for European corn borer and other field crop insects. By G. A. Ficht and T. E. Hienton. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[1941]. p.54-55.

What kinds of light attract night-flying insects most? Least? By Lawrence C. Porter. General electric review. v.44, no.6. June 1941. p.310-313.

Poultry Houses - Lighting.

Effect of electric lights upon the growth of young chicks. By C. W. Carrick, R. E. Roberts and T. W. Hienton. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[1941]. p.90.

Effect of high and low wattage electric lights upon laying pullets. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941] p.91.

Projector lamps for brooding chicks. By D. C. Kennard and V. D. Chamberlin. In bimonthly bulletin, Ohio agricultural experiment station. v.26, no.209. March-April, 1941. p.48-52.

Poultry Houses and Equipment.

Cooling poultry houses for laying hens. Pacific rural press. v.141, no.12. June 14, 1941. p.461.

Poultry housing conditions in Missouri. By E. M. Funk. Columbia, Missouri, 1941. 11p. Missouri. Agricultural experiment station. Bulletin no.431.

Poultry housing investigations. By C. W. Carrick and I. D. Mayer. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind.,[194 . p.89-90.

Producer Gas.

Producer gas is the motor fuel of Finland. By Hans A. Branders. Automotive industries. v.84, no.9. May 1, 1941. p.482-485. According to recent release of the Motor Products Division of the U. S. Department of commerce, covering automotive-market conditions in Finland, private passengercar owners in that country were cut off entirely from supplies of liquid motor fuel in the spring of 1940 and truck owners thereafter were given gasoline only if they produced proof that they had installed gas generators on their vehicles or had arranged for such installations. There resulted a great demand for wood and charcoal generators, which numerous manufacturers in Finland hastened to fill, with result that by end of 1940 there were total of 8500 motor vehicles equipped with generators in country. Sale and installation of such generators formed, in fact, main business of automobile dealers during year. Article deals with technical problems of gas producers for motor vehicles, from special contributor in Finland.

Quick Freezing.

New quick freezing system. By Huis H. Bartlett and H. E. Brown. Refrigerating engineering. v.42, no.2. August 1941. p.83-87. Advantages and disadvantages of fluid contact freezing. Authors, working at the university of Texas on direct contact methods of freezing foodstuffs, have perfected the "polyphase" quick freezing system which is described in this article. New system retains advantages of direct contact systems used heretofore, they say, and overcomes some of handicaps previously met in practice.

Refrigeration.

A.S.R.E. standard methods of rating and testing mechanical condensing units. By joint committee on rating commercial refrigerating equipment. Refrigerating engineering. v.42, no.1. July 1941. 15p. A.S.R.E. Circular no.14.

Graphical solution for multi-effect compression problems. By F. W. Hutchinson. Refrigerating engineering. v.42, no.1. July 1941. p.33-36.

Mechanical refrigeration of milk with units driven by gasoline engines and electric motors. By T. E. Hienton and W. B. Grizzard. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.23-24.

Moisture in refrigeration tubing. By P. J. Morell. Refrigerating engineering. v.42, no.1. July 1941. p.50, 52.

Preparing foods for freezing. By Dr. M. A. Joslyn. Pacific rural press. v.141, no.12. June 14, 1941. p.433. Fruits. Vegetables. Meats. Poultry. Fish.

Refrigeration for the farm household and farm produce. By Gail M. Redfield, T. E. Hienton and R. L. Witz. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.22.

Refrigeration in war time. By C. B. Morrison. Refrigerating engineering. v.42, no.1. July 1941. p.22-24, 60. Part II. England under the air raids.

Use of mechanical refrigeration for cooling and holding eggs on the farm. By W. B. Grizzard and G. W. Newell. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.23.

Refrigerator Lockers.

Economical farm freezing plants. By D. M. Rutherford. Pacific rural press. v.141, no.12. June 14, 1941. p.434.

Refrigerator Lockers. (Cont'd.)

Frozen food locker industry is growing up. In what's new in farm science. Part I, fifty-seventh annual report for year ended June 30,1940. Madison, Wis., 1940. p.60-62. Wisconsin. Agricultural experiment station. Bulletin no.450.

Home locker. By Edwin P. Arthur. Refrigerating engineering. v.42, no.2. August 1941. p.95-96.

Locker storage plant. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.13-14. Washington. Agricultural experiment station. Bulletin no.394.

Make good use of freezer lockers. By Charlotte C. Buslaff. Hoard's dairyman. v.86, no.6. March 25, 1941. p.210, 217.

Walk-in cooler and refrigeration units. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.14. Washington. Agricultural experiment station. Bulletin no.394.

Refrigerators.

Farm storage refrigerator. In science works for the farmer. Fifty-second annual report for the fiscal year ending June 30, 1940. Fayetteville, Ark., 1940. p.14. Arkansas. Agricultural experiment station. Bulletin no.405.

Research.

Industrial research. Science. v.93, no.2424. June 13, 1941. p.561-562. Conclusions are drawn from extensive survey in which 2,350 companies reported 70,033 persons engaged in technical research in American industry at average annual cost of $300,000,000.

2 per cent for research. By Dr. Karl T. Compton. Stove builder. v.6, no.4. April 1941. p.40, 42, 46, 48. Statement on the necessity of developing new products and processes to keep America at work after the defense emergency.

Rubber.

Properties of some synthetic rubbers. By L. B. Sebrell and R.P. Dinsmore SAE journal. v.49, no.3. September 1941. p.368-379. Brief review of development of synthetic rubbers is given. Difficulty encountered in substituting synthetic for natural rubber is discussed, and it is pointed out that, from consideration of their molecular structure, one should not expect two rubbers to be interchangeable in every way, but that special handling technique undoubtedly will have to be developed. Results of certain vulcanizable synthetic rubbers in two typical rubber

Rubber. (Cont'd.)

formulas are compared with one another and with natural rubber. New dynamic test is described, and results of these same rubbers in same formulas as used for compounding tests are given. Data on dynamic modulus, internal friction, resilience and heat buildup are also presented It also is shown that, with one particular type of synthetic rubber, relatively low loading of carbon black is necessary in order to give physical properties which approach those of natural rubber when measured by same test.

Silt.

Effect of accelerated erosion on silting in Morena reservoir, San Diego county, Calif. By F. F. Barnes, C. J. Kraebel and R. S. LaMotte. Washington, U. S. Govt. print. off., 1939. 21p. U. S. Department of agriculture. Technical bulletin no.639.

Soil Moisture.

Soil moisture relationships in apple orchards. By Harry G. Nickle. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.91-92. Washington. Agricultural experiment station. Bulletin no.394.

Sprays and Spraying Equipment.

Spraying farm orchards in war time. By H. G. H. Kearns and H. Martin. Bath, 1940. p.35-41. University of Bristol. Agricultural and horticultural research station. Annual report, 1939.

Storage of Farm Produce.

Apple storage. By W. W. Smith. In agricultural research in New Hampshire. Annual report of the director of the New Hampshire agricultural experiment station for 1940. Durham, N. H., 1941. p.37. New Hampshire. Agricultural experiment station. Bulletin no.330.

Apple storage investigations. By M.A.R. Kelley, C. E. Zeitz, E. T. Swink, G. D. Kite and A. H. Teske. In progress report, 1939-1940: research and investigational activities in agricultural engineering. Blacksburg, Va., 1940. p.55-57. Bulletin of the Virginia Polytechnic institute. v.34, no.3.

Controlled-atmosphere storage of apples. By R. M. Smock and A. Van Doren. Ithaca, N. Y., 1941. 45p. Cornell university. Agricultural experiment station. Bulletin no.762.

Design of small potato storages for farm use. By W. T. Ackerman. In agricultural research in New Hampshire. Annual report of the director of the New Hampshire agricultural experiment station for 1940. Durham, N. H., 1941. p.20. New Hampshire. Agricultural experiment station. Bulletin no.330.

Storage of Farm Produce. (Cont'd.)

Gasproof storages aid in British food plan. Refrigerating engineering. v.42, no.1. July 1941. p.39.

Grain storage on the farm. By Thomas E. Long and Myron G. Cropsey. Fargo, N. Dak., 1941. 68p. North Dakota. Agricultural experiment station. Bulletin no.302.

Harvesting and storing of sweet potatoes. By L. C. Beaner. Southern planter. v.102,no.9. September 1941. p.12.

Losses in potato storage from different handling methods. In report of Michigan agricultural experiment station for the two years ended June 30, 1940. East Lansing, Mich., 1940. p.6.

Ozone in apple storage. By R. M. Smock and R. D. Watson. Refrigerating engineering. v.42, no.2. August 1941. p.97-101. In interesting series of tests which authors describe here, use of ozone was found to reduce materially mold spore count in apple storage rooms. It was also found to check spread of rots on scabby apples significantly. Effect of ozone on reducing ripening rate of apples is not clear cut, but is in favor of ozone treatment. They point out that more study is needed on effect of ozone on apple scald in storage.

Temporary storage. By H. R. Sumner. Grain and feed review. v.30, no.12. August 1941. p.18. Article is symposium of "open-air" storage experiences gained in Canada and elsewhere.

Where will 1941 wheat be stored? Montana farmer. v.28, no.21. July 1, 1941. p.5, 8. Storage "bottleneck" may prevent some farmers from obtaining loans; outlines marketing procedure; wheat loan, protein schedules.

Swine Houses and Equipment.

California hog raising practices. By Baird Snodgrass. Pacific rural press. v.141, no.10. May 17, 1941. p.369-370.

Electric pig brooders. In fiftieth annual report of the Washington agricultural experiment station for the fiscal year ended June 30, 1940. Pullman, Wash., 1940. p.13. Washington. Agricultural experiment station. Bulletin no.394.

Practical hog houses for Indiana. By I. D. Mayer and C. M. Vestal. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.26-27.

Terraces.

Ability of grasses to protect terrace outlet channels being tested. In science serving agriculture; report of the agricultural experiment station of the Oklahoma A. and M. college for the biennium July 1, 1938 to June 30, 1940. Stillwater, Okla., 1940. p.25.

Equipment for terrace construction. By J. T. McAlister. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.86.

Terrace dimension changes and the movement of terrace ridges resulting from different farming practices. By L. H. Schoenleber. Washington, D. C., 1941. 21p. Mimeographed. U. S. Department of agriculture. Soil conservation service.

Tractors.

Comments on new test procedure of rubber tired tractors. By Carlton L. Zink. Farm implement news. v.62, no.16. August 7, 1941. p.22.

Economic aspects of farm tractor operation. Selected references, 1935-March 1941. Compiled by Nellie G. Larson. Washington, D. C., 1941. 54p. Mimeographed. U. S. Department of agriculture. Bureau of agricultural economics. Economic library list no.26.

Tests of the new Ford tractor. In report of Michigan agricultural experiment station for the two years ended June 30, 1940. East Lansing, Mich., 1940. p.6.

Tractor costs in Michigan, 1939. By F. M. Atchley. Quarterly bulletin. Michigan agricultural experiment station. v.23, no.2. November 1940. p.99-105.

Tung Oil.

Tung oil culture. By H. A. Gardner, P. H. Butler and F. Scofield. Washington, D. C., National paint, varnish and lacquer association, inc., 1941. 126p. National paint, varnish and lacquer association. Scientific section. Special circular.

Ultra-Violet Rays.

Effect of ultra-violet irradiation on the growth of chicks. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.90.

Projector lamps for brooding chicks. By D. C. Kennard and V. D. Chamberlin. Bimonthly bulletin. Ohio. Agricultural experiment station. v.26, no.209. p.48-52. March-April 1941.

Walls.

Anchoring stucco and cement plaster to existing wall construction. Concrete. v.49, no.9. September 1941. p.18, 29.

Water Supply.

Declining water level confronting the rice farmers. In science works for the farmer. Fifty-second annual report for the fiscal year ending June 30, 1940. Fayetteville, Ark., 1940. p.15-16. Arkansas. Agricultural experiment station. Bulletin no.405.

Ground water studies. In fifty-first annual report of the Arizona agricultural experiment station for the year ending June 30, 1940. Tucson, Ariz., 1941. p.26-30.

Report of Sacramento-San Joaquin water supervision for year 1940. Sacramento, Cal., 1941. 187p. Processed. California. Department of public works. Division of water resources.

Water Supply, Rural.

Recent developments and applications of the household water supply system. By G. E. Henderson. In 42nd annual convention of association of southern agricultural workers. Proceedings. Raleigh, N. C., Capital printing co., 1941. p.92-93.

Sanitary evaluation of private water supplies. By Ralph L. France. Amherst, Mass., 1941. 11p. Massachusetts. Agricultural experiment station. Bulletin no.383.

Weeds.

Farm weeds: Their importance and control. By A. B. Massey. Blacksburg, Va., 1941. 120p. Virginia Polytechnic institute. Bulletin. v.34, no.14.

One man looks at one weed. By Robert W. Howard. Farm journal & farmer's wife. v.45, no.9. September 1941. p.18-19.

Plowing as a means for controlling mint anthracnose infection. By R. H. Wileman and R. C. Baines. In research aids farm progress. Fifty-third annual report of Purdue university agricultural experiment station. Lafayette, Ind., [1941]. p.20-21.

Power weed burner developed for Rio Grande project. By L. R. Fiock. Reclamation era. v.31, no.8. August 1941. p.226-227.

Weed control investigations. In research aids Utah agriculture. Biennial report of Utah agricultural experiment station, 1938-1940. Logan, Utah, 1940. p.35-38.

Weed control on federal reclamation projects. By L. H. Mitchell. Reclamation era. v.31, no.8. August 1941. p.227-228.